up or proved futile resulting into of infructuous expenditure; and

(b) if so, the number and details of such projects given up or proved futile during the past five years and the infructuous expenditure involved in regard thereto ?

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (SHRI MALLIKARJUN) : (a) As any research & development activity has certain inherent risks particularly in a dynamic environment a few weapon projects undertaken by Defence Research & Development Organisation for developing import substitutes have been short closed for various reasons viz. changes in threat perception and warfare scenario, long development time, high production cost of indigenously developed items etc. However the expenditure incurred on such projects is not infructuous. The expertise gained and infrastructural facilities set up under such projects are directly useful to future projects undertaken in these areas.

(b) During past five years, six weapon projects for developing import substitutes have been short closed or not pursued for production. These projects and expenditure incurred till closure, which was not infructuous, are as under :—

(i) Development of a rocket : Rs. 28·92 lakhs.

(ii) Development of a bomb : Rs. 3·02 crores.

(iii) Development of an illuminating ammunition : Rs. 18·31 lakhs.

(iv) Development of a Gun : Rs. 66·01 lakhs.

(v) Development of practice-head for a weapon : Rs. 79·70 lakhs.

(vi) Development work for conversion of guidance system of a weapon : Rs. 52·32 lakhs.

Production of equipment for satellite based navigation system

2163. SHRI SURESH KALMADI : Will the PRIME MINISTER be pleased to state :

(a) whether it is a fact that Government propose to develop and produce all equipments needed for the satellite based navigation system for the aviation sector, both civilian and military purposes;

(b) if so, what is the total cost involved; and

(c) when the proposal is likely to be implemented ?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE & TECHNOLOGY, DEPARTMENT OF ELECTRONICS, DEPARTMENT OF OCEAN DEVELOPMENT AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI P. R. KUMARMANGALAM) : (a) As per the agreement of International Civil Aviation Organisation, for switchover from conventional Communication, Navigation and Surveillance (CNS) System to Satellite based system from 2000, six key technologies have been planned to develop for phased implementation.

(b) The development cost is estimated to be Rs. 23 crores.

(c) The development programme was initiated in October, 1992. It will take 3 to 5 years to complete in steps for different items of the system. Thereafter, it will be operationalised in phases as per implementation plan of the International Civil Aviation Organisation.

Status of Colour Television Industry

2164. SHRI S. AUSTIN : Will the PRIME MINISTER be pleased to state :

(a) the status of Colour Television Industry in the country;

(b) the production by each colour television manufacturer alongwith brand name and the quantity produced by each of them during 1992;

(c) the multinational companies approved for manufacture of colour television and the annual production by each of them; and

(d) the steps taken by Government to boost indigenous television industry so that it can compete with multinational television companies ?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE & TECHNOLOGY, DEPARTMENT OF ELECTRONICS, DEPARTMENT OF OCEAN DEVELOPMENT AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS (SHRI P. R. KUMARMANGALAM) : (a) The production of Colour Television in the country during last 3 years was as follows :

Year	Production
1990	12·0 lakhs no.